THE ONTARIO MENTAL HEALTH FOUNDATION

annual report 1988/1989

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The Ontario Mental Health Foundation is a charitable Foundation, Registration No. 0370494-11-13. Donations to further research into the causes of mental illness, and for the development of improved treatments are needed, and may be sent to:

Ontario Mental Health Foundation
365 Bloor Street East
Suite 1708
Toronto, Ontario
M4W 3L4

Receipts will be issued for income tax purposes.

The Ontario Mental Health Foundation

Established by Special Act of Legislature of the Province of Ontario, 1960-61.

Members as at March 31, 1989

Marlene Longdon, R.N., M.Sc.N.
Chairman, Burlington

Sidney Freedman, LL.B.
Vice-Chairman, Toronto

Andrea Baumann, R.N., Ph.D.
Hamilton

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Staff

Dugal Campbell, Ph.D.
Executive Director

Margaret Clark, Director,
Finance and Administration

Louise Brown

Anita Macatangay

Jessie Paterson

Audrey Stefanovich

Report from the Chair

1988-89 is the second year of a five year plan initiated by the Foundation subsequent to an external review. The first year had resulted in a review of the mission statement, a restructuring of objectives, a new organizational structure and a strong committment to the Foundation members to an active involvement in the actualization of our goals.

Careful priority setting, the development of partnerships and creative thinking are essential to the task at hand. We believe the changes the Foundation has made in its organization, research and educational programmes will help to meet the challenges of the 90's.

The Provincial report "Building Community Support for People: A Plan for Mental Health in Ontario" recommended that the Ministry of Health:

i. develop a strategy for applied research and evaluation in the mental health field; and
ii. that efforts be made to develop a mental health training strategy. With these, as well as many other factors in mind, the Foundation established a number of new research and educational programmes.

In the Fall of 1988-89 a "Small Grants Competition" was established to encourage new investigators and new ideas to come forward. This programme will complement the regular research grants program which in 1988-89 provided 47 researchers with an opportunity to explore a diverse range of research issues. The research grants programme was assisted by the diligent work of the Research Committee under the leadership of Dr. Simon Young.

A competition in the area of Applied and Community Mental Health Research was made possible by a special grant from the Ministry of Health. A special review committee was struck to review proposals and was ably led by Mr. Gordon Morwood.

The Foundation also managed a competition for the Ministry of Community and Social Services; in 1988-89 this programme supported 34 grants. The review committee for this competition was chaired by Dr. Quinsey.

The individual awards program remains a vital link in the Foundation's programmes. This year 39 scientists received awards that will enable them to continue their contribution to Ontario's research efforts. Dr. Bertha Madras provided leadership to this committee and raised some critical issues for the Foundation to consider in the year to come.

I would like to express the appreciation of the Foundation to the members of all the committees for their generous donation of time and expertise without which this work would not be possible.

During the past year the Foundation, responding to feedback from the field, made a committment to expand the composition of the peer review committees to include a wider range of scientists. The expansion of membership will, we hope, encourage a broader range of proposals and create a better balance in the funding of basic and applied research.

In addition to its Research Programmes, the Foundation has a strong committment to ensuring that research findings reach the practitioners in the field. A small working group was responsible for developing workshops for mental health practitioners. The first area to be addressed was housing for the mentally ill. A very successful conference brought practitioners and researchers together to share ideas, knowledge and concerns.

The Foundation staff completed 18 site visits to Ontario universities to explain programmes and open up channels of communication for future collaboration. We would like to express our appreciation to those who attended these meetings and shared their thoughts and concerns.

Government support, both in spirit and funds is critical for research to develop in a time of fiscal constraint. I would like to take this opportunity to thank the Honourable Elinor Caplan for her ongoing committment to the field of mental health and mental health research.

And finally I would like to extend my sincere appreciation to the members of the Foundation, the staff and the many scientists and practitioners for the teamwork that has resulted in a productive year and a positive direction for the future.

Marlene Longdon

Marlene Longdon, Chairman August 1989

The Objectives of the Ontario Mental Health Foundation

In 1988 the Foundation approved the following statement:

The objectives of the Foundation shall be:

first, to support research which will improve and enlarge the knowledge required to promote mental health and to prevent, treat and cure psychopathology; second, to collect information about mental illnesses and the sciences bearing upon mental illness so that the Foundation may actively plan programmes of research which will maximise the benefits to be expected from the funds available to subsidise research; third, to provide information and instruction to practitioners so that knowledge generated by investigation is disseminated and promptly used; and fourth, to communicate to the general public the results of research and to develop among lay people informed opinions about the promotion of mental health and the prevention and treatment of mental illness.

The Foundation's Programmes

To realise these objectives the Foundation provides funds to a number of programmes; in the case of the first objective the Foundation runs a research grants programme and a fellowships programme. Both programmes have been planned with the following general principles in view.

1. The first criterion in awarding funds will be the scientific quality of the proposed work. The best interests of the Foundation and the public will be served only if excellent applications for awards come forward, and from a wide range of research interests.
2. Given the limits of the Foundation's resources and the many aspects of mental disorder the Foundation can serve the Province best by promoting work on a broad range of topics. Therefore, the Foundation should not be identified with any one research focus.
3. In scientific research one aims at a moving target. The Foundation should, therefore, adopt policies that permit changing the mix of research and that allow new investigators to enter the field.

The Foundation will support research work which deals with any of the biological, psychological or social factors which either foster mental health or lead to mental illness. The Foundation aims to improve knowledge about the prevention of mental disorder, and the rational and efficient diagnosis, treatment and rehabilitation of the mental diseases. The Foundation will accept applications dealing with any period of the life-span, any of the factors thought to cause psychopathology, and from any of the relevant scientific specialties. The Foundation has a particular interest in studies which address mental health problems of importance in Ontario.

Report on the Scientific Work of the Foundation

Four topics, which were the objects of discussion and action during the year 1988-89, merit attention: the special competition in applied research and community mental health; the Foundation's statement of objectives; the revision of the Foundation's programmes; and the composition of the peer-review committees. All the grants and awards funded by the Foundation in 1988-89 are listed on the last pages of this annual report.

1. The special competition

Early in 1988-89 the Foundation heard from the Minister of Health that she was prepared to make a special award of $480,000. to be directed towards research work to do with children and prevention of disease. The award was made to the Foundation following a visit made to the Minister by the former chairman (Mr. Peter Lush), the chairperson, Ms. Marlene Longdon and the Executive Director. The Foundation directed these additional funds to projects and fellowships which had already been approved for support, and which fell within the terms of reference set forth by the Minister. The awards which were supported under the special grant from the Ministry of Health are shown in the list of awards and fellowships at the end of this report.

These additional funds made it possible to reinforce the Foundation's work in prevention and community health research. To do so the Foundation ran a special competition in the Fall of 1988, inviting applications dealing with prevention of disease, research into treatments and community mental health. This competition was introduced with the Graham Report in mind and emphasis was placed on community mental health and the need to support community-based research.

2. The Foundation's objectives

The Foundation continued its consideration of the public statement of priorities and objectives which it puts out to describe its aims and methods. In May the Foundation adopted a new statement of objectives (printed immediately following the chairman's report). In addition to the statement of objectives the Foundation adopted a set of guidelines to govern the awards programmes mounted by the Foundation. The guidelines emphasize, first, that the major aim of the Foundation is to support work of high scientific merit in fields of investigation relevant to mental health and, second, that the Foundation wishes to ensure that it has a programme of support which will allow it to respond flexibly to advances in science.

3. Revision of the Foundation's programmes

The new guidelines led to revisions in the grants programme overseen by the research committee (project grants) and in the work of the fellowships committee (fellowships).

The research project programme will be based upon three types of grants: major research grants, "regular" research grants (similar to those which the Foundation used for a number of years) and small grants directed towards new ideas and new investigators.

The fellowships programme will be based upon four awards, namely: senior research fellows, new faculty fellows, travelling fellows, and post-doctoral fellows. A number of awards which provide research for careers will be brought to an end; those who are currently incumbents of these awards will be able to finish the award under the terms in which it was originally awarded but no new long-term awards are contemplated. The Foundation wished to ensure that funds will be available to new people entering the field balanced by funds available to seasoned researchers.

The new guidelines, and the revisions in the programmes to which they led, involved both the Research Committee and the Fellowships Committee in a substantial effort to devise rules and guidelines which would give clear instructions to applicants. The new awards were advertised in the Foundation's rules published in the summer of 1988; the first applications to come in under the new rules arrived in the Fall of 1988 and the awards were made by the Foundation for the 1989-90 year. The net result of the new pattern of funding is that the forward commitments of the Foundation will, in the course of time, be reduced somewhat and in any given year more funds will be available to support new applicants entering the competition or to applicants starting a new line of work.

Mrs. Margaret Clark, the Director of Finance and Administration, and Dr. Dugal Campbell, the Executive Director, paid a number of visits to universities and other institutions in Ontario from which applicants could be expected to send grants. The object of the visits was to explain the new awards to university researchers and to people working in research offices. The visits led not only to a better understanding of the new competitions but also to discussions about the relations between the Foundation and smaller institutions which do not figure so often in the Foundation's list of grantees. It is apparent that investigators in some institutions feel themselves at a disadvantage in entering the competition. As a result a workshop on how to mount a grant application was held at Lakehead University in the Fall; it was attended by a substantial number of scientists from Northern Ontario.

4. Peer-review

During the Fall of 1989 four peer-review committees judged the applications submitted to the Foundation's regular competition, the Foundation's fellowships competition, the competition managed by the Foundation for the Ministry of Community and Social Services, and the special competition. In all, a total of forty-one scientists sat on these committees. The peer-review system places substantial demands on those who consent to take part in review committees. It requires attention to technical detail as well as a knowledge of the general thrust of scientific work. The Foundation owes a substantial debt to those scientists who volunteer their time and effort in taking part in the peer-review committees.

During the course of the year members of the Foundation have considered the composition of the Foundation's review committees. Peer review must be carried out in a way that identifies scientifically meritorious applications. In addition, it must be carried out in a manifestly fair way so that applications from all centres and applicants from all disciplines can be confident their applications will be fully and fairly examined. The Foundation's Nominations Committee met in the Spring of 1989 to review a substantial number of names of scientistscollected by a polling process and collected with the aim of recruiting committee members from a wider range of specialties and institutions than had been represented on the Foundation's review committees in the past. The essential rule, which has been agreed as the basis for choice, is that members of the review committees must be active and capable scientists so that the first objective of the Foundation, supporting work of scientific merit, is in the hands of capable judges.

Foundation Programmes

As a statutory foundation, the OMHF receives most of its funds in the form of an annual grant from the Province of Ontario.

The Foundation offers 1) fellowships to those who wish to take up careers in mental health research, and 2) support for research projects undertaken by investigators who plan to do research in the field of mental health. There is also a limited programme of support for conferences and publications.

A complete listing of all research projects, major equipment grants, and fellowships funded by the Foundation in 1988-89 will be found in the following pages of the report.

How to Apply for Grants

Copies of the Rules for Project Research, Fellowships and application forms may be obtained from the research offices at universities in Ontario, or upon request from the Foundation.

The Ruth Schwartz Foundation Award

During 1988-89, a donation of $10,000 was received from the Ruth Schwartz Foundation. Research which will provide new knowledge about what contributes to emotional disturbances in children is of particular interest to the Schwartz Foundation.

The donation from the Ruth Schwartz Foundation, together with funds provided by the Ontario Mental Health Foundation, is supporting a study entitled "Intergenerational transmission of attachment" at Queen's University. Dr. Diane Benoit is the principal investigator.

The Velleman Foundation Award

The Velleman Foundation was incorporated in 1974 in honour of Leonard and Leonora Velleman. The Velleman's dedicated themselves to the care and treatment of severely mentally retarded infants and in 1951 established the Ontario Home for Mentally Retarded Infants. This facility is now known as the Plainfield Children's Home and is located in the community of Plainfield, a few miles north of Belleville, Ontario. The objectives of the Velleman Foundation are simple and clear: within the field of mental retardation to support programmes and initiatives both of individuals as well as of groups; to extend research and education; and to provide supplementary assistance in special cases.

Dr. Peter Szatmari of McMaster University carried out a study assisted by a grant made by the Velleman Foundation entitled "The two year outcome of non-retarded autistic preschool children".

The Ontario Mental Health Foundation
Statement of Operations
For the Year Ended March 31, 1989

	1989 $	1988 $
Revenue		
Province of Ontario (note 8)	3,377,336	2,875,700
Investment income	115,395	75,907
Donations (note 9)	37,502	131,823
Educational program	6,099	1,241
	3,536,332	3,084,671
Expenditure		
Awards --		
Research grants	1,794,044	2,069,852
Major equipment	3,763	23,509
Research associateships	394,997	381,688
Research scholarships	135,981	175,613
Fellowships -		
Long-term	165,973	149,226
Research	200,990	222,094
Training awards	47,250	24,648
Research studentships	90,150	88,034
Clinical research and development scientists	34,398	34,398
In-house research	—	10,186
	2,867,546	3,179,248
Administration (schedule of expenses)	318,371	279,600
Committee meetings	43,883	33,801
	3,229,800	3,492,649
Excess (deficiency) of revenue over (under) expenditure for the year	306,532	(407,978)

The Ontario Mental Health Foundation
Statement of Changes in Operating Fund
For the Year Ended March 31, 1989

	1989 $	1988 $
Balance - Beginning of Year	204,354	612,332
Excess (deficiency) of revenue over (under) expenditure for the year	306,532	(407,978)
Balance - End of Year	510, 886	204,354

Statement of Changes in Endowment Fund (note 5)
For the Year Ended March 31, 1989

	1989 $	1988 $
Balance - Beginning of Year	1,695,597	1,558,317
Investment income	170,875	137,280
Balance - End of Year	1,866,472	1,695,597

Statement of Changes in M.C.S.S. Lottery Fund—Held in Trust (note 6)
For the Year Ended March 31, 1989

	1989 $	1988 $
Balance - Beginning of Year	534,135	628,187
Lottery grants received	828,291	519,976
Investment Income	46,290	29,753
	1,408,716	1,177,916
Research grants	1,186,137	643,781
Balance - End of Year	222,579	534,135

Statement of Changes in L-Deprenyl Fund (note 7)
For the Year Ended March 31, 1989

	1989 $	1988 $
Balance - Beginning of Year	—	
Grants received	795,200	
Balance - End of Year	795,200	

The Ontario Mental Health Foundation
Balance Sheet as at March 31, 1989

Assets	1989 $	1988 $
Current Assets		
Cash and investments - at cost, which approximates market, plus accrued interest	**3,570,411**	2,495,991
Advances to grantees (note 2)	**289,614**	279,022
Unspent awards receivable (note 3)	**50,995**	5,582
Other accounts receivable (note 4)	**29,253**	17,825
Prepaid expenses	**1,387**	1,440
	3,941,660	2,799,860
Fixed Assets		
Furniture and fixtures - at cost	**66,021**	58,382
Less: accumulated depreciation	**35,899**	36,342
	30,122	22,040
Total Assets	**3,971,782**	2,821,900

Signed on Behalf of the Foundation

Chairman

Vice-Chairman

The Ontario Mental Health Foundation
Balance Sheet as at March 31, 1989

Liabilities	1989 $	1988 $
Current Liabilities		
Research and equipment grants, fellowships and associateships payable	315,911	360,718
Accounts payable and accrued liabilities	60,320	27,096
Grants received, payable in future years	200,414	—
	576,645	387,814
Equity		
Operating Fund	510,886	204,354
Endowment Fund (note 5)	1,866,472	1,695,597
M.C.S.S. Lottery Fund - Held in Trust (note 6)	222,579	534,135
L-Deprenyl Fund (note 7)	795,200	—
	3,395,137	2,434,086
Total Liabilities and Equity	3,971,782	2,821,900

Auditors' Report to the Members of the Foundation and the Provincial Auditor

We have examined the balance sheet of The Ontario Mental Health Foundation as at March 31, 1989 and the statements of operations, changes in operating fund, changes in endowment fund, changes in M.C.S.S. lottery fund and changes in the L-Deprenyl fund for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the Foundation as at March 31, 1989 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Coopers & Lybrand

Chartered Accountants

Toronto,
Ontario

The Ontario Mental Health Foundation
Notes to Financial Statements
For the Year Ended March 31, 1989

1. Depreciation
Depreciation of furniture and fixtures is calculated using the declining balance method at an annual rate of 10%.

2. Advances to Grantees
Certain projects are approved for funding for more than one fiscal year. Advances to grantees represent unspent funds from the current year's award which are to be carried forward and added to the following year's award.

3. Unspent Awards Receivable
Unspent awards receivable represent unspent funds at the time a project ends. Grantees are required to return this money to the Foundation.

4. Other Accounts Receivable
The Foundation incurs costs in the administration of the M.C.S.S. Lottery Fund which are directly reimbursed by the M.C.S.S. This amount represents the balance owing to the Foundation.

5. Endowment Fund
The endowment fund has arisen through bequests to the Foundation. It is the Foundation's intention to utilize interest income in excess of inflation to finance future research awards.

The assets of the fund at March 31, 1989 comprised cash and investments of $1,866,472 (1988 - $1,695,597).

6. M.C.S.S. Lottery Fund - Held in Trust
In 1986 the Ministry of Community and Social Services (M.C.S.S.) through an Order-in-Council was awarded an interprovincial lottery allocation for 1986 - 1987 and beyond. These funds are used to support applied research and program evaluation studies related to the handicapped over a five year period. The Foundation administers these funds under agreement with the Ministry.

The net assets of the fund at the balance sheet date comprise:

	1989 $	1988 $
Cash and investments at cost	84,339	416,474
Advances to grantees	132,038	117,661
Unspent awards receivable	15,576	—
	231,953	534,135
Less: Grants payable	9,374	—
	222,579	534,135

7. L-Deprenyl Fund
During the year the Ministry of Health provided the Foundation with funds exclusively to cover the costs of new research into the effects of L-Deprenyl on Alzheimers Disease. The assets of this fund at March 31, 1989 comprised cash and investments of $795,200 (1988 - Nil).

8. Revenue from the Province of Ontario
During the year the Foundation received a one time special grant from the Ministry of Health in the amount of $480,000 of which $372,236 has been recognized in revenue.

9. Donations
Donations are recorded when received by the Foundation and are used in the support of research as directed by the members of the Foundation.

10. Award Commitments
The Foundation has made commitments of approximately $8,304,749 to fund projects over the next nine fiscal years as follows:

	$
1989/1990	2,837,353
1990/1991	1,885,459
1991 1992	959,402
1992/1993	728,416
1993/1994	670,176
1994/1995	494,023
1995/1996	271,589
1996/1997	244,431
1997/1998	213,900

11. Operating Lease
The minimum annual lease payments under an operating lease for the premises which expires on September 1, 1989 are $11,452 for fiscal year 1990.

The Ontario Mental Health Foundation
Schedule of Expenses
For the Year Ended March 31, 1989

	1989 $	1988 $
Administration		
Salaries	259,327	187,791
Employee benefits	17,284	17,623
Office expenses	57,835	44,300
Rent	28,729	28,803
Consultant's fees and expenses	3,114	7,500
Audit and legal	7,595	8,530
Telephone	5,010	4,683
Depreciation - office furniture and fixtures	2,413	2,403
Sundry	—	196
Reimbursed by M.C.S.S.	(62,936)	(22,229)
	318,371	279,600

Report on research projects and individual awards (1988-89)

Research work can be described in a number of different ways, for example: as basic or applied research; or according to the nature of the scientific specialties involved, e.g. as psychological or physiological; or according to the nature of the disorders whose causes and cures are sought, e.g. depression, Alzheimer's disease.

An analysis of the Foundation's research effort used a variant of a method developed by the Health Research and Development Council of Ontario; the results are reported here. The method uses a number of broad divisions to analyse the nature of the research effort, viz:

1. research aimed at the description of disorders (natural history; epidemiology) and the development of measuring devices and tests;

2. the search for basic physiological, psychological or social mechanisms underlying normal or abnormal conduct (basic research) often using animal "models" or laboratory preparations;

3. research which tests explanations (physiological, psychological or social) for a particular disorder (applied basic research) often using patients as experimental subjects;

4. studies of diagnosis, treatment and rehabilitation of a disorder (clinical research);

5. studies of health services (operations research); studies aimed at health promotion and disease prevention; equipment grants.

An investigation may fit into more than one category and as a consequence some decisions are near-arbitrary; the tables below show the main features of the Foundation's work along this broadly conceived basic-to-applied continuum.

Summary data

RESEARCH GRANTS

In the Fall of 1987 the Foundation received 94 grant applications for research grants and 10 applications for equipment grants; a number of applications were withdrawn from the competition prior to the peer-review. Of these new applications 25 research projects and 1 equipment grant were approved for support.

During the year 1988-89 the Foundation supported 51 research projects and 1 equipment purchase; 10 of the 51 research projects were funded by a special grant to the Foundation from the Ministry of Health.

In addition 34 grants were supported from funds provided by the Ministry of Community and Social Services.

Table 1

Project and equipment grants shown by type of research (1988-89) and by funding source:

		OMHF	MCSS
1.	Description; measurement	6	8
2.	Basic research	22	2
3.	Applied basic research	14	5
4.	Diagnosis, treatment	7	19
5.	Other	3	0
		52*	34

* 10 of these 52 grants were supported by a special grant from the Ministry of Health

Individual Awards

In the Fall competition of 1987 a total of 38 applications were received for new individual awards and for renewals of existing awards; of these applications 20 were approved for support.

During the year 1988-89 the Foundation supported 38 individuals; the awards ran from studentships (the most junior) to research associates (senior career awards). Three of the individual awards were supported from a special grant made to the Foundation by the Ministry of Health.

Table 2

Individual awards (1988-89) shown by type of research:

1.	Description, measurement	5
2.	Basic research	16
3.	Applied basic research	12
4.	Clinical research	4
5.	Other	1
		38

Members of the Foundation's Peer-Review Committees

Research Committee	S. Young, Ph.D. (Chairman)	Montreal, P.Q.
	S. Black, M.D.	Toronto
	P. Boksa, Ph.D.	Verdun, P.Q.
	P. Chang, Ph.D.	Hamilton
	N. Delva, M.D.	Kingston
	S. Goldberg, Ph.D.	Toronto
	J. McGlone, Ph.D.	London
	M. Rivard, M.D.	Ottawa
	R. Rylett, Ph.D.	London
	S. Segalowitz, Ph.D.	St. Catharines
	P. Szatmari, M.D.	Hamilton
Fellowships Committee	B. Madras, Ph.D. (Chair)	Massachusetts
	J. Cleghorn, M.D.	Hamilton
	C. Cunningham, Ph.D.	Hamilton
	S. George, M.D.	Toronto
	C. Gibson, Ph.D.	London
	B. Humphrey, M.D.	Hamilton
	J. Inglis, Ph.D.	Kingston
	B. Jones, M.D.	Ottawa
	R. Pivik, Ph.D.	Ottawa
	B. Suranyi-Cadotte, M.D.	Montreal, P.Q.
MCSS Review Committee	V. Quinsey, Ph.D. (Chairman)	Kingston
	J. Davis, Ph.D.	Hamilton
	H. Day Ph.D.	North York
	G. Fernie, Ph.D.	Toronto
	R. Gallop, Ph.D.	Toronto
	K. Graham, M.A.	London
	J. Holden, Ph.D.	Kingston
	E. Moore, Ph.D.	Kingston
	D. Pederson, Ph.D.	London
	F. Scott, M.D.	Hamilton
	C. Stavrakaki, Ph.D.	Ottawa
	L. Wood, Ph.D.	Guelph
Special Committee	G. Morwood, M.S.W.(Chairman)	Toronto
	S. Burke, Ph.D.	Kingston
	S. Davidson, M.B.	Ottawa
	B. Lancee, Ph.D.	Toronto
	R. Manchanda, M.B.	London
	R. Norman, Ph.D.	London
	M. Pancer, Ph.D.	Waterloo
	C. Skinner, Ph.D.	Etobicoke

LIST OF RESEARCH GRANTS

MCMASTER UNIVERSITY, HAMILTON

Dr. G. Brown and C. Mancini **$43,338.**

Suicide and pineal function

Those who attempt suicide and those who complete suicide come from separate but overlapping groups; the difficulty is to predict into which group an individual will fall. Dr. Brown is examining biochemical measures which may allow one to estimate the chances of a completed suicide attempt.

Dr. P. Chang **$57,888.**

Cloning of a gene associated with neurodegeneration (including a major equipment grant)

Dr. Chang is attempting to establish the genetic basis of a neurodegenerative disorder seen in infancy.

Dr. S. Denburg and R. Carbotte **$45,183.**

Cognitive deficits associated with brain cross-reactive lymphocytotoxic antibodies in Systemic Lupus Erythematosus

A new field of investigation is the study of psychological disorders in relation to the immune system. Dr. Denburg has discovered that changes in visual and spatial abilities are linked with alterations in immune capacity. She is now trying to describe the cognitive changes and to link them to measures of the immune systems effectiveness.

Dr. R. Mishra **$19,739.**

Characterization of monoclonal antibodies produced against dopamine receptors

Dr. Mishra is using recombinant DNA technology to identify the dopamine receptor in the brain. The dopamine receptor responds to a neurotransmitter thought to be important in the causation of schizophrenia.

Dr. R. Mishra **$38,100.**

Studies on the interaction of a hypothalamic factor (L-proly-L-leucyl-glycinamide) with biogenic amine receptors in CNS

Dr. Mishra is examining how the activity of the dopamine receptor is modulated by chemical factors. The study has implications for such diseases as tardive dyskinesia, and Parkinsonism and for relapse in schizophrenia.

Dr. H. Munroe-Blum and E. Marziali **$44,396.**

A randomized clinical trial of specific time-limited group treatment (SGTB) of borderline patients

Dr. Munroe-Blum is examining the effect of group treatment upon borderline patients. Individual psychotherapy is not helpful with these patients and Dr. Munroe-Blum is looking to see if group therapy is effective.

Dr. L. Niles **$40,955.**

Brain target sites for melatonin and N-acetyl-5-methoxykynurenamine: modulation of GABAergic function and cyclic nucleotide synthesis

Dr. Niles is examining how the pineal gland influences brain homeostasis and neurotransmitter function throughout the brain.

Dr. M. Steiner and E. Werstiuk **$49,010.**

Adrenergic receptor responsiveness in depression

One theory to explain mood disorders is failure of regulation of a central biochemical system (noradrenergic system). Dr. Steiner and Dr. Werstiuk are testing the hypothesis that depressed patients have an overactive noradrenergic system and that treatment with either electroconvulsive therapy or lithium corrects the imbalance.

Dr. P. Szatmari **$12,832.**

The two year outcome of non-retarded autistic preschool children

The criteria for diagnosing autism in children have recently been altered; Dr. Szatmari is conducting a study to find out what happens to children who are diagnosed as autistic, but who are not also mentally retarded, in the years before they go to school.

UNIVERSITY OF OTTAWA

Dr. P. Hrdina and Y. Lapierre **$53,070.**

Therapeutic range and prospective dosing of antidepressants

This project is designed to investigate whether there is a useful relation between the levels of the drug which can be measured in blood in depression and the outcome of drug treatment.

Dr. D. Peters **$22,417.**

The effect of prenatal stress on brain development in the rat

There is evidence that stress during pregnancy can affect the development of the fetal brain. Dr. Peters is examining the effects of prenatal stress on a number of chemical systems in rat brain with the aim of making a model of what may happen in the human case.

Dr. D. Stuss **$35,539.**

Frontal lobe functions

Dr. Stuss is making three studies aimed at examining disorders that arise from lesions in the frontal lobes of the brain. It is thought that patients with frontal lobe damage are particularly liable to make mistakes of judgement due to distraction and to make mistakes in their assessment of risk.

QUEEN'S UNIVERSITY, KINGSTON

Dr. J. Holden **$54,000.**

The use of DNA markers in carrier assessment of fragile-x syndrome and other forms of x-linked mental retardation

One form of mental retardation is associated with a change in the X chromosome. Prevention of these forms of mental retardation may be possible by detecting carriers of the chromosome. The object of this investigation is to develop probes which will detect markers on the chromosome closely linked to the mutation which causes the "fragile X syndrome".

Dr. K. Jhamandas **$39,037.**

Pharmacological protection against cortical and hippocampal cholinergic deficit induced by the endogenous neurotoxin, quinolonic acid

One feature of Alzheimer's disease is degeneration of neurons which form part of an identifiable brain region. Dr. Jhamandas aims to provide an animal model for Alzheimer's disease by using a neurotoxin which produces degeneration in an analogous region of rat brain.

Dr. C. Woogh **$28,309.**

The applications of an ongoing psychiatric record linkage system

Dr. Woogh has set up a record linkage system with the aim of developing a more complete evaluation of a regional psychiatric service. The investigation will enable one to study such things as: readmission; vulnerability to mental illness in specific age and sex cohorts.

UNIVERSITY OF TORONTO

Dr. U. DeBoni **$55,967.**

Fundamental studies on the etiology of Alzheimer's disease

Dr. Deboni is examining how filaments, found in the brain cells of Alzheimer's patients, could be the result of an alteration in the way genes in the affected cells express themselves.

Dr. B. Fried **$15,023.**

Performance, structure, and interorganizational relationships in Ontario general hospital psychiatric units

The study is the outcome of another investigation (funded by the National Health Research and Development programme) which provided instruments to allow the investigators to examine the organization and mangement of Ontario general hospital psychiatric units.

Dr. C. Greenwood **$51,442.**

Alterations in monoamine receptor availability after methionine administration

Dr. Greenwood is conducting a basic investigation to show if brain nerve receptors have their functions altered by the administration of particular drugs.

Dr. D. McLachlan and M. Percy **$43,973.**

Gene expression in Alzheimer's disease.

The etiology of some forms of Alzheimer's disease is unknown; in the familial form there appears to be a mutation on chromosome 21. The aim of this investigation is to identify the gene responsible for familial Alzheimer's disease using modern techniques of molecular biology.

Dr. T. Morley **$50,000.**

Canadian brain tissue bank

The study of brain tissue collected from patients who, during life, had a psychotic or organic disease is important to establishing the physiological basis of mental disease. The Canadian Brain Tissue Bank is a source of tissue for researchers across Canada.

Dr. M. Moscovitch and K. Pape **$36,623.**

Effects of perinatal lesions in the caudate nucleus

Premature babies often suffer from a hemorrhage which causes blood to leak into the frontal portions of the brain. Dr. Moscovitch is taking advantage of this "experiment of nature" to look into the effects of this damage upon memory.

Dr. P. Seeman **$84,833.**

Dopamine receptors in schizophrenia, a program approach

Dr. Seeman is examining the theory that schizophrenia is due to an abnormality associated with dopamine in the brain. He proposes that a likely basis for abnormality is in the receptors for this neurotransmitter in brain cells.

Dr. P. Seeman **$52,936.**

Isolation of normal and schizophrenic brain D_2 dopamine receptors

The object of this investigation is to isolate and purify the dopamine receptor in the brain. The working hypothesis is that the dopamine (D_2) molecular structure is abnormal in schizophrenia.

Dr. F. Vaccarino **$ 9,561.**

Cholecystokinin/dopamine interaction in reward function and behavioural activation

Dr. Vaccarino is studying the interaction of two different neurotransmitters in the brain: cholecystokinin and dopamine.

UNIVERSITY OF WESTERN ONTARIO, LONDON

Dr. Y. Archibald **$17,022.**

Cognitive functioning in treated longterm survivors with slow- and fast-growing primary brain tumors

Dr. Archibald is measuring the cognitive changes which are seen in patients who have had an operation on the brain to remove a tumor.

Dr. I. Gotlib **$57,630.**

The effects of postpartum depression on infant development

Mothers, who have delivered a baby, sometimes fall victim to a depression. Dr. Gotlib is examining the nature of the interactions between depressed mothers and their infants.

Dr. D. Pederson and G. Chance **$20,936.**

Maternal stress and social support as predictors of the quality of the infant's home environment for mothers of preterm and full-term infants

The purpose of the research is to describe emotional stress in mothers due to premature birth and the sources of social support available to mothers who have given birth prematurely.

Dr. R. Rylett **$20,547.**

Actions of neurotoxins and neuronotrophic agents in cultured cholinergic neurons

Dr. Rylett is examining the possibility of developing an animal model for Alzheimer's disease by the use of substances which are known to damage the sectors of the brain which deteriorate in Alzheimer's disease. She is also examining regeneration in the central nervous systems which are damaged in the disease.

CLARKE INSTITUTE OF PSYCHIATRY, TORONTO

Dr. K. Freund and R. Blanchard **$19,737.**

Assessing the diagnostic power of an objective test of dangerous sexual inclinations

Dr. Freund is developing a test which will enable one to detect those offenders likely to commit a dangerous offence following discharge from prison.

Dr. S. Kish **$ 5,215.**

Neurochemical study of the brain in neuroleptic malignant hyperthermia

There is a complication of neuroleptic drugs called neuroleptic malignant syndrome. Dr. Kish is carrying out a study of changes in the neurochemistry of the brains of individuals who died after this complication of drug administration.

Dr. J. Levene and M. Seeman **$22,498.**

The prediction of length of time to relapse from family functioning and expressed emotion in families of schizophrenics

There is evidence which suggests that family interactions influence the course of schizophrenic illness. The study aims to measure whether expressed emotion and family function predict recurrences of a schizophrenic illness.

Dr. B. Martin and G. Bean **$37,850.**

An empirical investigation of the competency of psychiatric patients to make informed treatment decisions about ECT

The investigators are constructing a questionnaire which will enable one to distinguish the grounds on which consent to treatment is given or refused. The aim is to determine whether patients' refusal of, or consent to, treatment is compatible with recent legal and research criteria of what constitutes a competent decision.

Dr. S. Tang **$44,261.**

Solubilization, purification and initial characterization of human plasma imipramine binding sites

Pharmacological studies have shown that there is a malfunction of brain neurotransmitter systems in affective illness. Dr. Tang is examining some aspects of the biochemical system of the brain which are known to be disordered in depression.

Dr. B. Toner **$16,988.**

Irritable bowel syndrome: a cognitive attentional model

The basis for this illness remain uncertain. Dr. Toner is investigating the prospect that the source of the illness lies in the way people interpret signals arising from normal bodily events.

HOSPITAL FOR SICK CHILDREN, TORONTO

Dr. S. Goldberg and R. Simmons **$37,613.**

Social functioning of preschoolers with congenital heart disease (CHD)

Dr. Goldberg is following a group of children who have congenital heart disease; they are being compared with healthy controls. It is thought that children who have a chronic illness may be at risk for emotional and psychological disturbances and that these disturbances can be predicted and prevented.

Dr. S. Goldberg and R. Simmons **$37,745.**

Severity of congenital heart disease and early development

The purpose of this study is to evaluate the severity of congenital heart disease as it influences psychosocial development in the first year of life in infants. It is unclear whether severity of illness can account for the high rates of behaviour and academic problems which are found subsequently in this group of children.

Dr. M. Lovett **$59,700.**

Training and transfer effects in dyslexic children's response to remedial treatment

About eleven percent of boys and three percent of girls are affected by dyslexia which hinders learning to read and write. Dr. Lovett is carrying out an investigation to find out which training programmes are most effective in remedying this condition.

MOUNT SINAI HOSPITAL, TORONTO

Dr. D. Silver **$27,525.**

The long-term follow-up and natural history of borderline patients

Patients with borderline personality disorder are difficult to treat; until recently there has been no data about long-term outcome of this illness. The object of this study is to follow a group of patients in relation to a number of predictor variables.

SUNNYBROOK MEDICAL CENTRE, TORONTO

Dr. S. Black **$35,366.**

Extinction and unconscious access in the neglect syndrome

Unconscious processing is important, not only in the emotional domain, but also in the cognitive and perceptual domain. Dr. Black is examining the effect of organic brain damage in denying patients access to the unconscious processes which are necessary for cognitive and perceptual performance.

TORONTO GENERAL HOSPITAL

Dr. G. Rodin and C. Littlefield **$39,880.**

Predicting adjustment and psychosocial morbidity in the medically ill

Dr. Rodin's studies are designed to examine how people adapt to a chronic medical illness. The extent to which psychological disorder occurs among medical patients and its relation to the illness is the object of his study.

TORONTO WESTERN HOSPITAL

Dr. P. Carlen **$47,918.**

Altered sedative-hypnotic drug responses and excitable membrane properties of neurons from aged compared to younger mature rats

Dr. Carlen is examining some of the mechnisms which underly the way in which older brain cells respond to the administration of drugs and which may influence the use of drugs in elderly patients.

LIST OF INDIVIDUAL AWARDS

MCMASTER UNIVERSITY, HAMILTON

Research Associates

Dr. G. Brown

The neuroendocrine system and psychopathology

Dr. Brown is carrying out a programme of research into the interaction of the nervous system and the endocrine system.

Dr. R. Mishra

Studies of the mechanism of modulatory effect of PLG on dopamine receptors in CNS

Dr. Mishra is examining the way in which the dopamine receptor, thought to be important in schizophrenia, operates in the brain.

Dr. M. Pisa

Role of basal ganglia in neuropsychiatric disorders

Dr. Pisa is examining the concept that schizophrenia, affective disorders, Huntington's disease, and Parkinson's disease have a common anatomical and biochemical substrate. Dr. Pisa is carrying out a program of animal research directed to the common systems which are disordered in these diseases.

Dr. J. Seggie

A pineal-retinal-hypothalamic theory of depression

Dr. Seggie is documenting the connexions between normal circadian variations of physiological function, the day/night cycle and disturbances in these rhythms seen in depression.

Dr. H. Szechtman

Dopamine and sensory attentiveness

Dr. Szechtman is examining a number of behavioural changes which follow alterations in brain dopamine systems.

Research Scholar

Dr. P. Chang

Pseudo sulfatase deficiency - molecular explanation for its escape from neurodegeneration

Dr. Chang has discovered that there are individuals who, although they have a cellular anomaly, do not have the disease which usually follows. This "experiment of nature" allows her to investigate why some individuals are protected from the disease.

Clinical Research and Development Scientist

Dr. J. Cleghorn

Dr. Cleghorn is carrying out a number of inves tigations in relation to schizophrenia and is also developing training programs for young psychiatrists which will enhance their research skills and equip them for further work in teaching and research.

Long-Term Fellows

Dr. M. Miceli

Neuropeptide regulation of circadian rhythms

Dr. Miceli is examining biological rhythms which have a period approximating 24 hours (circadian rhythms); little is known about how these rhythms are regulated by the central nervous system. Dr. Miceli is examining whether there is a central pacemaker and whether disorders of the central pacemaker have an influence on affective disorders.

Dr. L. Niles

Brain target sites for melatonin and N-acetyl-5-methoxykynurenamine: modulation of GABAergic function and cyclic nucleotide synthesis

There is evidence that the pineal gland is capable of influencing aspects of brain physiology by secreting the hormone melatonin. Dr Niles is examining the mechanism by which melatonin influences the brain and how it is converted into other chemicals. The pineal gland and melatonin are thought to be influential in the causation of affective disorders and suicide.

Dr. E. Werstiuk

Biological studies relevant to depression

Dr. Werstiuk is carrying out a number of studies on the biology of depression: toxicity which results from combined treatment with lithium and neuroleptic drugs; disorders in biochemical 24 hour rhythms; and peripheral indicators in blood platelets of central nervous system changes which occur in depression.

Research Fellows

Dr. L. Archer

Neurological and psychiatric aspects of developmental language disorder

Dr. Archer is examining the way in which language difficulties in children are associated with psychiatric disorders.

Dr. J. Fleming

Childhood depression

There is a dearth of follow-up studies to show what happens subsequently to children who become depressed. Dr. Fleming has been using the Ontario Child Health Study to determine the prevalence of depression. She has been able to show that there is comorbidity between depression and anxiety and one question is the extent to which these two entities can be effectively distinguished.

Dr. B. Orpen

Neurochemical control of the circadian system

Dr. Orpen is studying the anatomy and chemistry of brain regions which control the body's system of circadian rhythms.

Training Award

Dr. R. Van Reekum

Dr. Van Reekum was given a travelling fellowship to complete the third year of his psychiatry training at Boston University. The aim of his travel study is to establish skills in behavioural neurology.

Research Student

Ms. C. McCormick

Differences in the two brain hemispheres and cognitive abilities

Ms. McCormick is examining the distribution of abilities between the two sectors of the brain and the mechanisms which lead to variations in hemispheric specialization.

QUEEN'S UNIVERSITY, KINGSTON

Research Fellow

Dr. M. Mauri

The role of sleep pattern fluctuation in PMS

Dr. Mauri is examining changes in sleep pattern in women who have the premenstrual syndrome.

Research Student

Mr. R. Metcalf

Endogenous acetylcholine release in rat basal forebrain

Metcalf is examining the hypothesis that senile dementia, and the cognitive decline of normal aging, are both associated with changes in cholinergic function in particular parts of the brain.

UNIVERSITY OF OTTAWA

Research Associate

Dr. R. Pivik

Electrophysiological correlates of psychosis/electrophysiological studies of childhood disorders/developmental studies of arousal thresholds during sleep/neurophysiological studies of sleep-wakefulness and immobility in the rabbit

Dr. Pivik is examining schizophrenic patients and patients with sleep disorders using electrophysiological methods.

Training Award

Dr. G. LaFleche

Dr. LaFleche has been awarded a travelling fellowship at Harvard University to carry out investigations of the changes which take place in the frontal lobe function in patients who suffer from Alzheimer's disease.

Research Students

Ms. L. Mercier

Physiological studies in learning disabled children

Ms. Mercier is studying the physiological characteristics of children who suffer from learning disabilities.

Mr. K. Murphy

Letting people know you like them. Assessing and ameliorating children's peer relations through affect communication skills training

Mr. Murphy is examining ways in which children's ability to get on with their peers can be improved through training.

UNIVERSITY OF TORONTO

Research Associates

Dr. U. DeBoni

Fundamental studies on the etiology of Alzheimer's disease
Dr. DeBoni is studying changes in gene expression which may be among the causes of Alzheimer's disease.

Dr. M. Moscovitch

Memory disorders in old people, organic amnesiacs and patients undergoing electro-convulsive therapy (ECT)
Dr. Moscovitch is examining the way in which memory fails in both normal amnesia and in Alzheimer's disease.

Research Fellow

Dr. M. Surbey

Environmental influences in the formation of mother-infant attachments
Environmental factors and cues presented by the infant exert considerable influence on maternal responding to a new-born child. Dr. Surbey is examining what factors in the environment promote or inhibit the formation of attachments in mothers to their newborn child.

Research Students

Mr. J. Francis

The chronic effects of anticonvulsant and anxiolytic drugs on CNS phenytoin binding sites. Isolation, purification and characterization of an endogenous peptide ligand for these sites
Mr. Francis is examining the mechanisms which underly epilepsy and the use of anti-epileptic drugs.

Mr. K. Jarvie

The molecular characterization of the dopamine D_2 receptor
The purpose of this study is to find, in post-mortem tissue from schizophrenic brains, if receptors for dopamine have a structure which can account for the unusual activity of the neurotransmitter dopamine in this disease.

UNIVERSITY OF WATERLOO

Research Fellow

Dr. S. Cassells

Will chronic NGF depletion of rat brain impair learning and cause an Alzheimer-type pathology?
Dr. Cassells is examining a hypothesis that nerve growth factor has an ongoing role in the adult mammalian brain and that failure of the nerve growth factor may be part of the cause in Alzheimer's disease. Dr. Cassells is attempting to develop an animal model which will allow him to test this hypothesis.

UNIVERSITY OF WESTERN ONTARIO, LONDON

Long-Term Fellow

Dr. S. Brudzynski

Involvement of the central cholinergic system in regulation of behaviour
Dr. Brudzynski is examining the role of a biochemical aspect (cholinergic system) of the central nervous system as it influences both normal and abnormal behaviour. Dr. Brudzynski is examining changes in motor and emotional behaviour as a result of alterations which can be induced in the cholinergic system.

Research Student

Ms. A. Robson

Low birthweight infants at 5 years
The purpose of the study is to identify factors which are associated with optimal behaviour of attention and cognitive development among a sample of five year old children who at birth were low-birth-weight infants.

CLARKE INSTITUTE OF PSYCHIATRY, TORONTO

Research Fellow

Dr. P. Li

Effects of antidepressant and antimanic agents on inositol phospholipid metabolism
Dr. Li is carrying out an investigation of the effects of drugs which are used to treat affective disorders on nerve cells.

HOSPITAL FOR SICK CHILDREN, TORONTO

Research Associate

Dr. M. Dennis

The effects of congenital, infantile and post-infantile damage to the brain in subsequent intelligence

Dr. Maureen Dennis is carrying out a survey, using psychological tests, to show the effects of brain damage in early life.

Research Scholar

Dr. J. Finegan

Prenatal testosterone and postnatal behaviour and cognition; a statement of proposed research

Dr. Finegan is examining the psychological and educational changes which take place in children who have had differing exposure to hormones prenatally

TORONTO GENERAL HOSPITAL

Research Fellow

Dr. G. Craigen

Withholding life sustaining therapy: a study of hospital staff and patients' attitudes and their consequences

Dr. Craigen is examining ways in which patients and their families can be informed about medical orders of the type usually referred to as "do not resuscitate". His study will examine the hypothesis that full and open discussion of such orders leads to an improvement in the attitude of patients and of the staff who are responsible for looking after them.

TORONTO WESTERN HOSPITAL

Research Scholar

Dr. A. Baskys

Alterations in CNS synaptic plasticity and drug interactions in aged rats (a model for Alzheimer's disease)

Dr. Baskys is looking at changes which take place in brain cells as they age to find out some of the factors in the causation of Alzheimer's Disease.

Research Fellow

Dr. I. Spigelman

Actions of sedative hypnotic drugs on neuronal ionic channels

The benzodiazepine drugs are used as hypnotics, anticonvulsants and muscle relaxants. Dr. Spigelman is investigating the mechanism by which these agents produce their effects on the neurons of the central nervous system.

MINISTRY OF HEALTH GRANTS

MCMASTER UNIVERSITY, HAMILTON

Dr. B. Levy **$49,644.**

Diagnosing and remediating processing skills related to reading failure

This investigation aimed to pick up, earlier than is now usually done, children who have difficulty in learning to read; once these children have been detected special classes to remedy the deficiency can be put in hand.

Dr. P. Szatmari (Long-Term Fellow)

Developmental neuropsychiatry

Dr. Szatmari's study has three objectives: to describe the development of children diagnosed as autistic but not retarded (using new diagnostic criteria); to identify predictors of good outcome in these children; and to find whether there are distinct groups of children who have different outcomes.

QUEEN'S UNIVERSITY, KINGSTON

Dr. K. Minde **$47,254.**

Diagnosis and treatment of sleep disorders in children

The aim of the study is to assess sleep patterns in children aged 13-36 months who have sleep disorders.

UNIVERSITY OF WATERLOO

Dr. K. Rubin and L. Rose-Krasnor $11,923.

The relations between infant attachment status, critical life experiences and indices of psychopathology at four years: a longitudinal investigation

This investigation, which uses an international data base, is examining the proposition that psychopathology may develop in children who have an unstable relationship with the individuals to whom children normally become attached in the first year of life.

YORK UNIVERSITY

Dr. J. Connolly $18,275.

Adolescent peer relations and mental health: a method of inquiry

It is known that disturbances of peer relations play a part in the mental health of adolescents. The social network mapping method is a device for describing the peer relations of adolescents more exactly.

CLARKE INSTITUTE OF PSYCHIATRY, TORONTO

Dr. L. Stermac $34,186.

The treatment of sexual offenders: a comparative outcome study

The incidence of sexual violence against women and children has reportedly increased. This increase has led to demands for the development of effective treatments for sexual offenders. The investigation is designed to evaluate the long-term outcomes of a treatment program aimed to reduce recidivism among sexual offenders.

C.M. HINCKS TREATMENT CENTRE, TORONTO

Dr. P. Marton and J. Connolly $26,119.

The social competence of adolescents with depressive disorders

Dr. Marton has examined the effects of depression on adolescent development. He is continuing his work to find out whether depressed adolescents are vulnerable to personality disorder as they grow up.

EARLSCOURT CHILD AND FAMILY CENTRE, TORONTO

Dr. D. Pepler and R. Mae $39,550.

Social skills training with aggressive children

This investigation is aimed at modifying the behaviour of children who are aggressive by providing them with training in social skills.

HOSPITAL FOR SICK CHILDREN, TORONTO

Dr. S. Goldberg $32,860.

Atypical attachment in risk population

Dr. Goldberg has been examining children who have suffered a variety of disadvantages - low-birth-weight, developmental delay, chronic illness, poverty leading to malnutrition - to discover in what way these conditions lead to failure of attachments to develop between mother and the child.

Dr. M. Lovett (Research Scholarship)

Diagnostic and treatment studies on developmental dyslexia

Dr. Lovett is carrying out an investigation into the factors which cause dyslexia, or difficulty to read which is found in school-age children.

Dr. M. Mian $29,362.

The effect of sexual abuse on preschool aged children

Awareness and reporting the sexual abuse of young children is increasing. This study aims to establish the specific effects of abuse on pre-school girls.

Dr. R. Simmons $24,912.

Investigation of family function and psychopathology of adolescent psychiatric emergencies

Dr. Simmons is comparing families which include an ill child and in which emergencies occur with other families where there are psychiatric difficulties but in which no emergencies occur. The aim is to find out factors which precipitate adolescent psychiatric crises.

TORONTO GENERAL HOSPITAL

Dr. C. Littlefield (Long-Term Fellow)

Adaptation and psychopathology in the medically ill

Dr. Littlefield is examining psychological changes in patients with medical illnesses. Patients with medical illnesses can have psychiatric disorders, although they may pass unnoticed.

MINISTRY OF COMMUNITY AND SOCIAL SERVICES GRANTS

LAKEHEAD UNIVERSITY, THUNDER BAY

Dr. A. Bowd **$ 1,028.**

An evaluation of community-based residential services for the developmentally handicapped in the Lakehead Region

The investigation was designed to find out the best way of meeting the wishes of the mentally retarded in relation to the choices they make between residential living and living independently.

MCMASTER UNIVERSITY, HAMILTON

Dr. L. Archer **$17,927.**

The eating behaviour inventory: an instrument to assess childhood eating and mealtime problems

Dr. Archer has developed a test which will enable physicians and nurses to identify problems in the management of eating and the mealtime behaviour of children. Difficulties at mealtime are frequently cited by parents who are having trouble with their children but at present there is no easy way of testing to see exactly where the difficulties lie.

Dr. D. Maurer **$37,333.**

Visual assessment and its relationship to cognitive status in developmentally handicapped children

There were two objectives in this investigation: the first is to compare a number of tests to find those which are most suitable for large scale visual screening of children, especially the developmentally handicapped, who are at risk for visual disorders. The second purpose is to examine the effect of intelligence on tests of vision.

QUEEN'S UNIVERSITY, KINGSTON

Dr. S. Burke **$44,016.**

A trial of stress-point preparation of repeatedly hospitalized physically disabled children

Parents whose children must often go to hospital suffer from repeated stress and their distress may make things more difficult for the sick child. This experiment investigated the effects of a pre-hospital and in-home intervention by nurses designed to reduce the stress.

Dr. J. Holden and B. White **$50,000.**

X-linked mental retardation: the use of DNA markers in carrier detection

Inherited forms of mental retardation, which are linked to a defect in the X chromosome, are known to affect both males and females. At present there is no reliable means of knowing which women are at risk for having a son with an X-linked form of mental retardation. Dr. Holden and Dr. White are attempting to develop a prenatal test of X-linked mental retardation.

Dr. J. Holden and B. McCreary **$76,600.**

Down's syndrome and Alzheimer dementia: clinical evaluation and genetics

Virtually every patient with Down's syndrome, a form of mental retardation caused by a defect on chromosome 21, shows the same neurobiological changes as patients with Alzheimer's disease. This result suggests there may be a genetic etiology for Alzheimer's disease. Dr. Holden and Dr. McCreary are examining this prospect by looking at both clinical symptoms and chromosome types in large families in which Down's syndrome and Alzheimer's disease occur.

Dr. P. MacLeod and S. Nag **$20,000.**

The prenatal diagnosis of neuronal ceroid-lipofuscinoses

The neuronal ceroid-lipofuscinoses are a group of hereditary neurodegenerative disorders of infancy and childhood. To date no biochemical abnormality has been established. Dr. MacLeod and Nag are examining a hypothesis that there is a gene responsible for the late infantile form of NCL and that this can be detected in a way which will permit prenatal diagnosis of the disorder.

UNIVERSITY OF TORONTO

Ms. J. Friedland and M. McColl **$17,404.**

The effect of social support intervention on psychosocial adjustment to stroke

Social support of various kinds has been shown to reduce poor outcome in various populations following medical disorders: social supports have not been extensively investigated in post-stroke patients. The study is a controlled clinical trial to test the hypothesis that social support will lead to better outcomes in patients who have had strokes.

Dr. J. Krondl **$43,309.**

Criteria for optimization of food assistance service to non-institutionalized frail elderly persons

The purpose of the research project was to assess home delivered meal services in order to find out the nutritional benefits of a service for frail elderly persons and to examine what leads to optimal effectiveness of the service in maintaining independent living.

Dr. V. Marshall **$82,526.**

Long stay patients in an acute care hospital: continuation

Dr. Marshall is investigating the importance of family support for chronically ill elderly patients who are in acute care or extended care facilities. He is examining the effect upon patients of changes which will take place over the time in the effectiveness of the support given by families, the resilience of family networks and the impact of support upon the caregivers (many of whom are themselves elderly).

Dr. M. Percy **$40,000.**

Risk factors in Alzheimer's disease

In her previous work Dr. Percy had detected a number of biochemical differences between Down's patients, who had Alzheimer's disease, and those who did not. This study will extend her investigation to those with Alzheimer's disease in a general population to see if the affected can be distinguished from the unaffected by the same tests.

UNIVERSITY OF WATERLOO

Dr. S. Evers and S. Lawton **$ 3,578.**

Evaluation of a nutrition intervention program for developmentally and physically handicapped residents in a long-term care setting

This investigation was designed to find out if the status of individuals who are handicapped can be improved when their nutrition is more thoroughly looked after. The objectives were to establish the nutritional status of individuals with developmental disabilities and second to implement a programme of rehabilitation.

Dr. J. Lord **$22,490.**

The process of supportive employment: a qualitative study of mentally handicapped adults at work

The study by Dr. Lord had three main goals: to trace the way in which mentally handicapped adults become employed in regular jobs; to describe the quality of life of the mentally handicapped who are employed in the community; and to identify the factors which lead to an improved quality of life and employment for the mentally handicapped.

UNIVERSITY OF WESTERN ONTARIO, LONDON

Dr. M. Fey **$43,545.**

The need for and effectiveness of early language intervention

Children who show a delay in the use of language at an early age are at risk for other problems. Dr. Fey is examining the effectiveness of different kinds of early intervention aimed at improving the language performance of children. He is also looking to see if some children who have a language impairment in early age overcome the delay spontaneously.

Ms. B. Frankel **$38,232.**

Evaluation of senior day programs in the London area of the Ministry of Community and Social Services

To support continued independent living for elderly people the Ministry of Community and Social Services supports several day programs for seniors in the London area. This project evaluates a number of these programs; there are two purposes: a description of the service provided and an initial assessment of the outcomes.

Dr. C. Naus **$44,325.**

Neocortical development and fetal alcohol syndrome in mice

Excessive alcohol consumption during pregnancy may lead to a condition known as the fetal alcohol syndrome which is defined by a pattern of anatomical malformations and ultimately mental retardation. The mechanism which connects alcohol consumption to the syndrome is unknown; this investigation is a study of the basic mechanisms.

UNIVERSITY OF WINDSOR

Ms. S. Cameron and R. Orr **$17,675.**

Caring for developmentally disabled children at home: a family system analysis

The goal of the present project is to identify the resources and the coping strategies which are used by families who are successfully looking after mentally handicapped children at home. The aim is to develop a model of professional services which can be most usefully made available to families who undertake to look after mentally retarded children in their home.

Ms. S. Cameron and R. Orr **$28,420.**

Caring for developmentally disabled adults at home: family adaptation through the life cycle

Nowadays increasing numbers of parents with handicapped children have elected to care for their children at home. At the moment little is known about families who have adult handicapped members living in the home; problems will arise as the parents themselves become older.

CLARKE INSTITUTE OF PSYCHIATRY, TORONTO

Dr. M. Konstantareas **$45,668.**

Early developmental backgrounds, cognitive, socioaffective, linguistic and behavioural characteristics of autistic and retarded children: possible interrelationships

The causes of autism in children are not known nor is the connection between autism and mental retardation. Dr. Konstantareas is making a systematic attempt to compare and contrast the developmental history of the two groups of children, the autistic and the mentally retarded.

HOSPITAL FOR SICK CHILDREN, TORONTO

Dr. M. Dennis **$30,429.**

Hydrocephalic children and adolescents: which aspects of their medical condition place them at risk for later problems in language and reading

Hydrocephaly is a condition with a number of variants. Dr. Dennis is attempting to use measures of later language and reading as a way of assessing how hydrocephaly affects the nervous system and later development.

Dr. S. MacKay-Soroka **$49,423.**

Hearing-impaired children's understanding of communication processes

A profound hearing loss may lead to delays in the development of communication skills. The purpose of this investigation is to provide detailed information on the developing communication skills of children with hearing impairments.

Dr. S. Marcovitch **$56,981.**

Early intervention: help or hindrance? Evaluation of program, parent and child predictors

In this study a group of infants with Down's syndrome will be assessed prior to entry into an infant stimulation program. They will be tested again after six months and after one year of program participation. Infant stimulation programs have been supported for some years now but there has been little systematic evaluation of program efficacy.

Dr. J. Rovet **$68,639.**

The school-age follow-up of children with congenital hypothyroidism identified by newborn screening in Ontario

Neonatal screening for congenital failure of the thyroid gland has been successful in preventing mental retardation. It is not known whether treated children achieve totally normal functioning or have difficulties later on. The aim of this study is to establish the extent to which children recover from early hypothyroidism.

ONTARIO INSTITUTE FOR STUDIES IN EDUCATION, TORONTO

Dr. L. Siegel **$49,691.**

Efficacy of a conversational model of language intervention with specifically language delayed and developmentally delayed children

Children whose language is delayed may prompt in their parents a pattern of responses different from those seen in normal child-parent pairs; and this pattern of responding parent may compound the child's difficulties. Dr. Siegel's study is an attempt to establish if early intervention and parent training overcomes these difficulties.

SURREY PLACE CENTRE, TORONTO

Dr. L. Atkinson **$38,051.**

Cognitive and affective adjustment in mothers with Down's syndrome children and quality of attachment

The attachment which normally forms between mothers and children can be disturbed by a number of events, for example, separation at birth. This investigation aims to examine what the effect is upon the formation of attachments when a child is born with a developmental handicap.

Dr. M. Feldman **$39,840.**

School-age children of mentally retarded parents: intellectual, academic, and personality status

Little is known about what happens to children who are raised by mentally-handicapped parents particularly when the children are of school age. This investigation is an examination of a group of children whose parents are mentally retarded. The aim is to assess the early interventions which may be helpful.

Dr. W. Williams **$24,313.**

A comparison of two strategies to maintain staff behaviours in community settings for developmentally handicapped persons

In recent years a number of studies have shown that staff can be trained in behaviour management skills which lead to an improvement in their handling of developmentally handicapped patients. An unknown factor is the extent to which these skills are maintained and consistently used in daily institutional life. This study compares two strategies to maintain staff behaviours in community settings.

THAMES VALLEY CHILDREN'S CENTRE, LONDON

Dr. I. Shultz **$ 29,383.**

Effectiveness of social skills training with physically handicapped children

Physically handicapped children may have difficulties in interacting with other children; as a result may suffer from feelings of diminished self-worth. If they are trained in social skills there may well be changes in their popularity. This investigation is a study of the effectiveness of social skills training in improving the quality of life of handicapped children.

REGION OF PEEL

Ms. B. Fernie **$25,000.**

Effectiveness of segregating as compared to integrating residents with Alzheimer's disease in groups

A practical intervention to reduce agitation disorientation and wandering in those who have Alzheimer's disease would improve the life and the manageability of the patients. This project will determine whether group therapy is an effective intervention for these problems.

YORK BEHAVIOUR MANAGEMENT SERVICES, TORONTO

Ms. D. Griffiths **$42,957.**

Validation of a new behavioural treatment for social skills training in mildly and moderately retarded adults.

Ms. Griffiths is examining the benefits that will accrue to developmentally handicapped adults from a comprehensive social skills training program. It will test whether the new skills transfer to the natural community and whether they lead to a better quality of life, more social contacts, an improved self image and less depression.

NIAGARA CHILD DEVELOPMENT CENTRE

Dr. J. Hundert **$ 500.**

Integrating developmentally handicapped children in preschools: teaching social skills in an integrated setting

The placement of handicapped children with non-handicapped peers in normal settings does not lead to spontaneous increases in social interaction or to peer acceptance. To improve the chances of such children doing well in normal settings social skills training has been used. This study is intended to examine if, after social skills training, there is an increase in peer and teacher acceptance.

HUGH MACMILLAN MEDICAL CENTRE, TORONTO

Ms. S. Jarvis and S. Naumann **$64,122.**

Mobility training and evaluation for the home or school environment

Those who are cognitively impaired may have difficulty in learning how to use devices which are intended to improve their physical mobility in the event that they suffer from physical handicaps. This investigation uses a computer based training program to help those whose cognitive function is low to learn to control a number of switches in preparation for control of a powered mobility device.

OTTAWA GENERAL HOSPITAL

Dr. J. Puxty **$20,000.**

A study of the benefits of a geriatric assessment of client referred to the integrated home maker program and chronic care programs of the Ottawa-Carleton Region

Requests for admission to hospital or an institution from people who are elderly and frail are determined by a number of factors. This study will make a randomized controlled trial of a detailed geriatric assessment applied to over four hundred frail elderly people. The aim is to find out if a detailed assessment is useful in determining whether individuals should be encouraged to live independently or transfer to an institution.

CHILDREN'S HOSPITAL OF EASTERN ONTARIO, OTTAWA

Dr. K. Nitsch and P. McGrath **$18,300.**

Social interaction and free play skills of developmentally handicapped preschoolers in integrated settings

This study assessed developmentally handicapped pre-schoolers in order to identify those who would benefit least from integration in a class of normal children; in addition the study set up a therapy designed to help those high-risk children fit in with normal class-mates.